DOCUMENTATION

Automating BRC details from DGFT website

Automation for Printing and Saving BRC details from DGFT website

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by

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Requirements:

- Firefox
- Selenium IDE
- Geckodriver
- Python
- AutoIT

CONTENTS

Download the necessary files:

The required files can be downloaded from the following Github repository:
https://github.com/udita-alawadhi/dgft-automation

From the “Clone or download” button, Click on the “Download Zip” button.

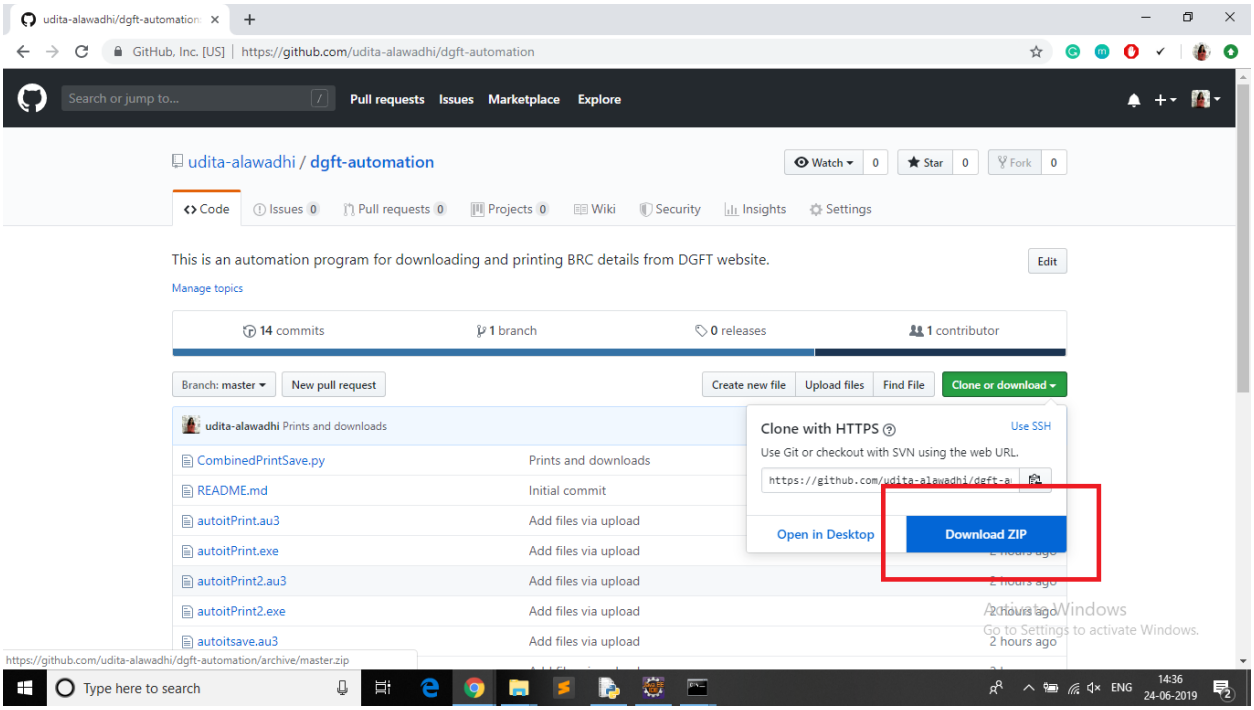

Image: Download the zip folder from Github

Unzip the folder to use the desired files required for the Automation process.

Installation Instructions:

1. **Firefox**
   Check if Mozilla Firefox is already installed in your system. If yes, proceed to the next step.

   If Mozilla Firefox is not present in your system, open the following link: https://www.mozilla.org/en-US/firefox/new/

   Download the browser application by clicking on the "Download Now" button as shown in *Image 1*.

   Double click on the downloaded Firefox Installer extension(.exe file) and keep following `Next` to Install.

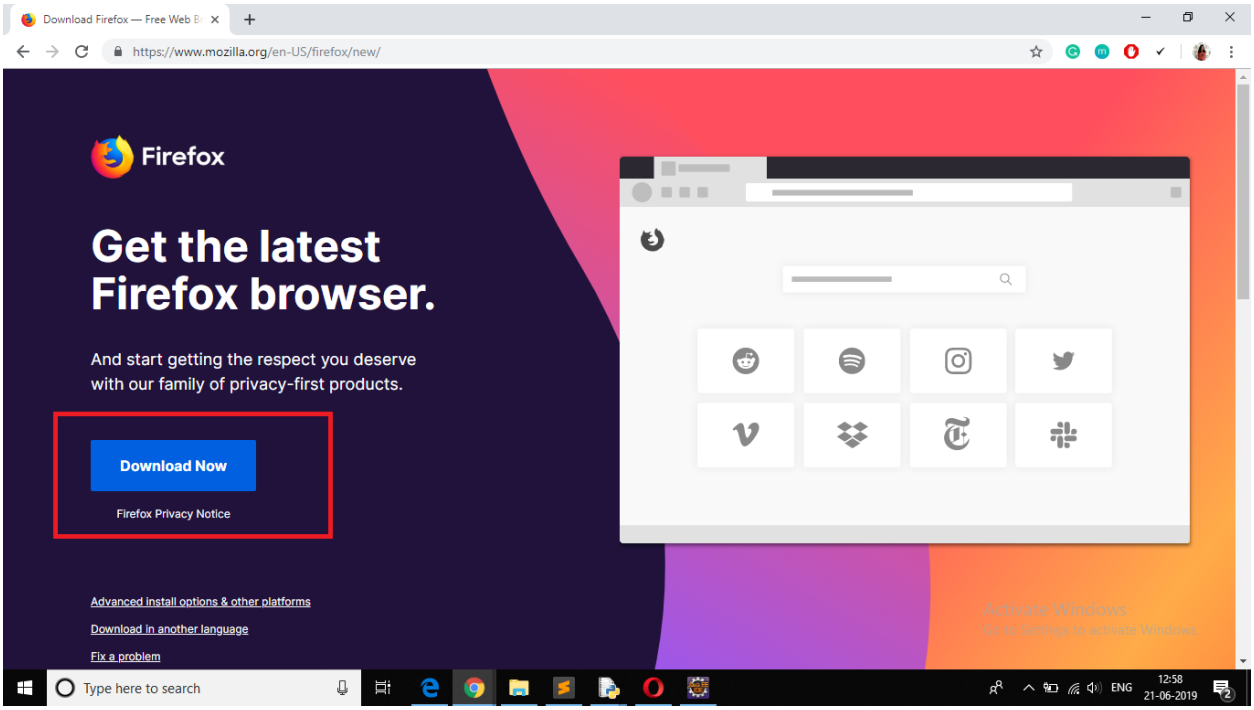

Image 1: Download button to install the Firefox web browser

2. **Firefox's Selenium IDE**
   Once the Firefox web browser is installed, open and enter the following link: https://addons.mozilla.org/en-US/firefox/addon/selenium-ide/

   Click on the "Add to Firefox" button:

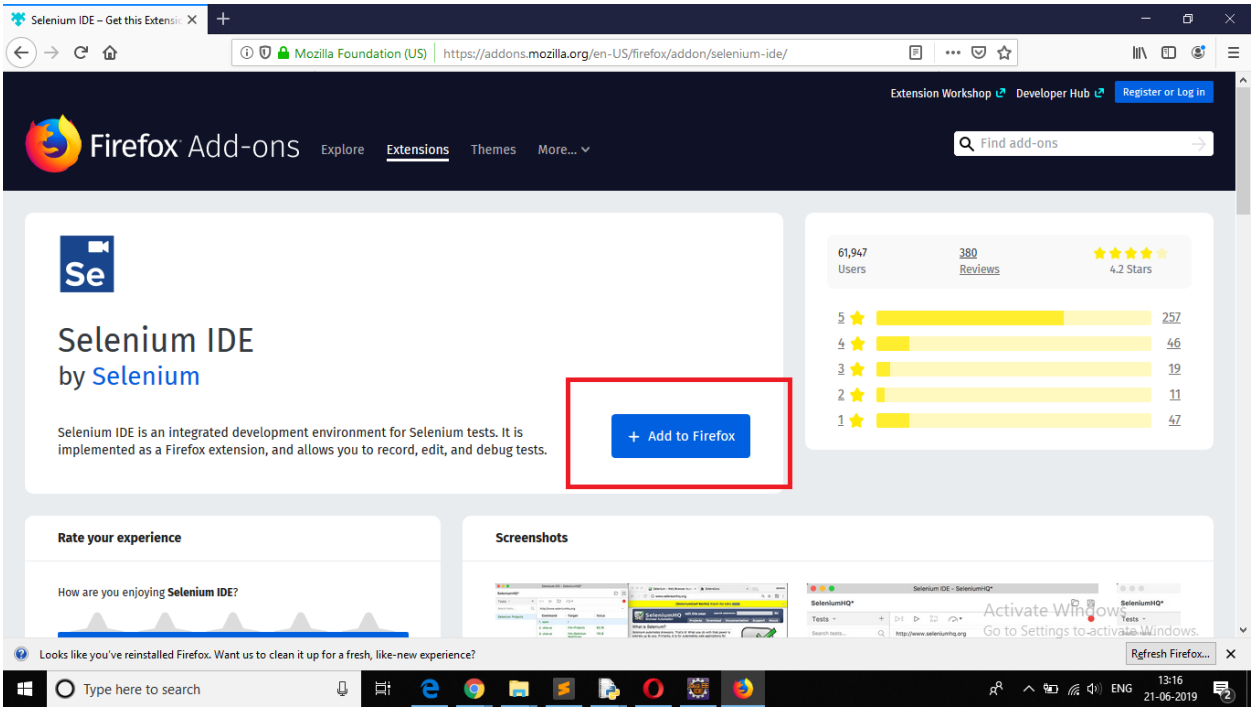

Image 2: "Add to Firefox" button

Firefox asks to Add Selenium IDE. Click on **Add**.

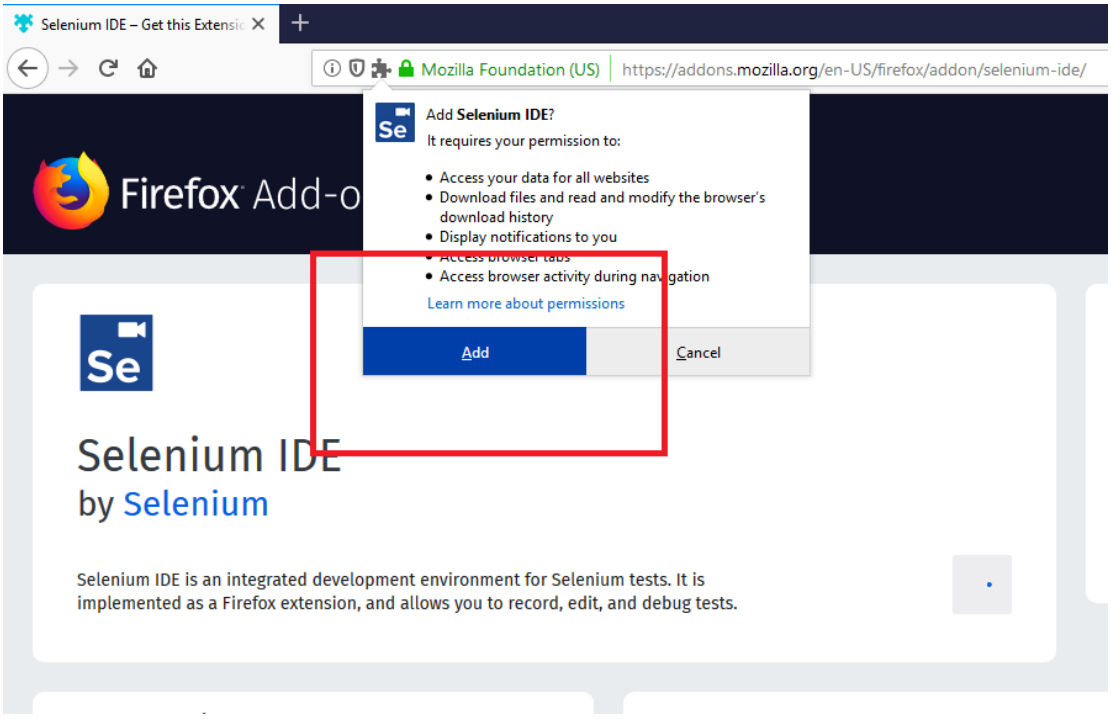

Image 3: The Add Extension button.

The extension gets added to the top right corner of the Firefox browser.

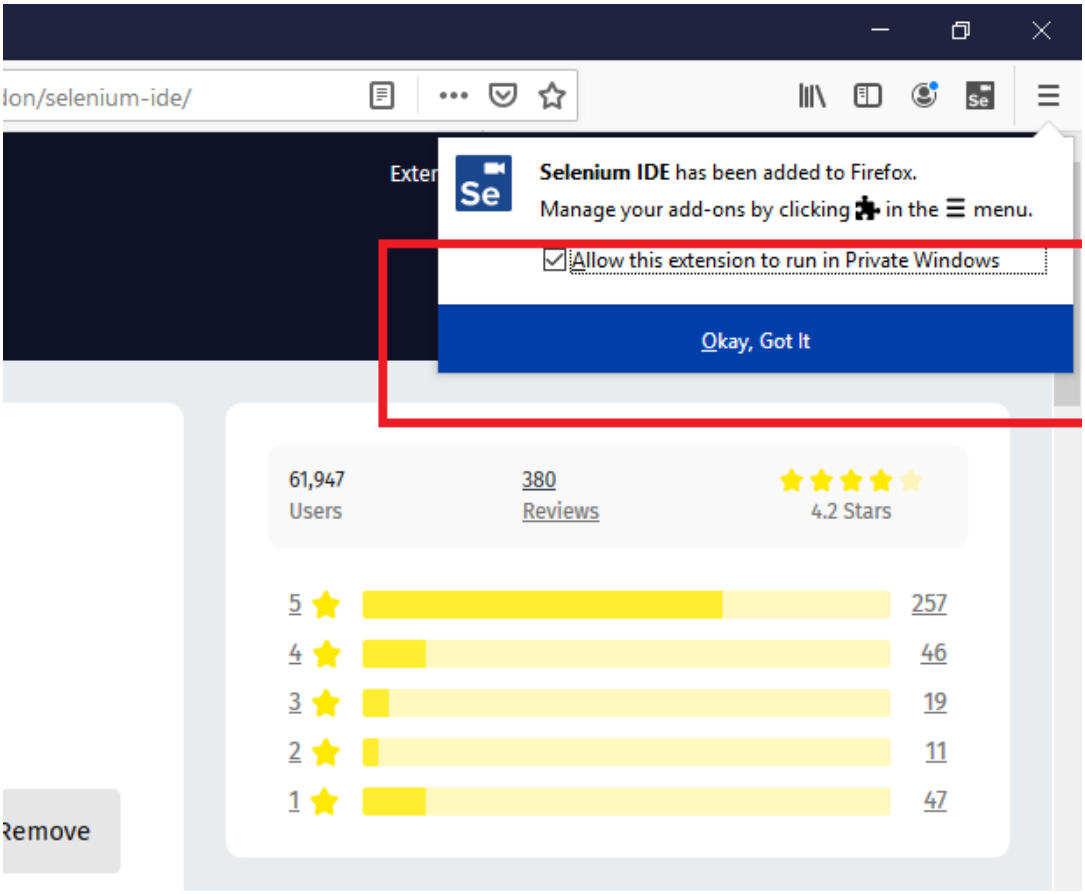

Image 4: Click on "Okay, Got it" button.

3. **Geckodriver**
   Open the following link:
   https://github.com/mozilla/geckodriver/releases

   Download the zip file suitable for your system. For example, for Windows 64, click on the geckodriver-v0.24.0-win64.zip.

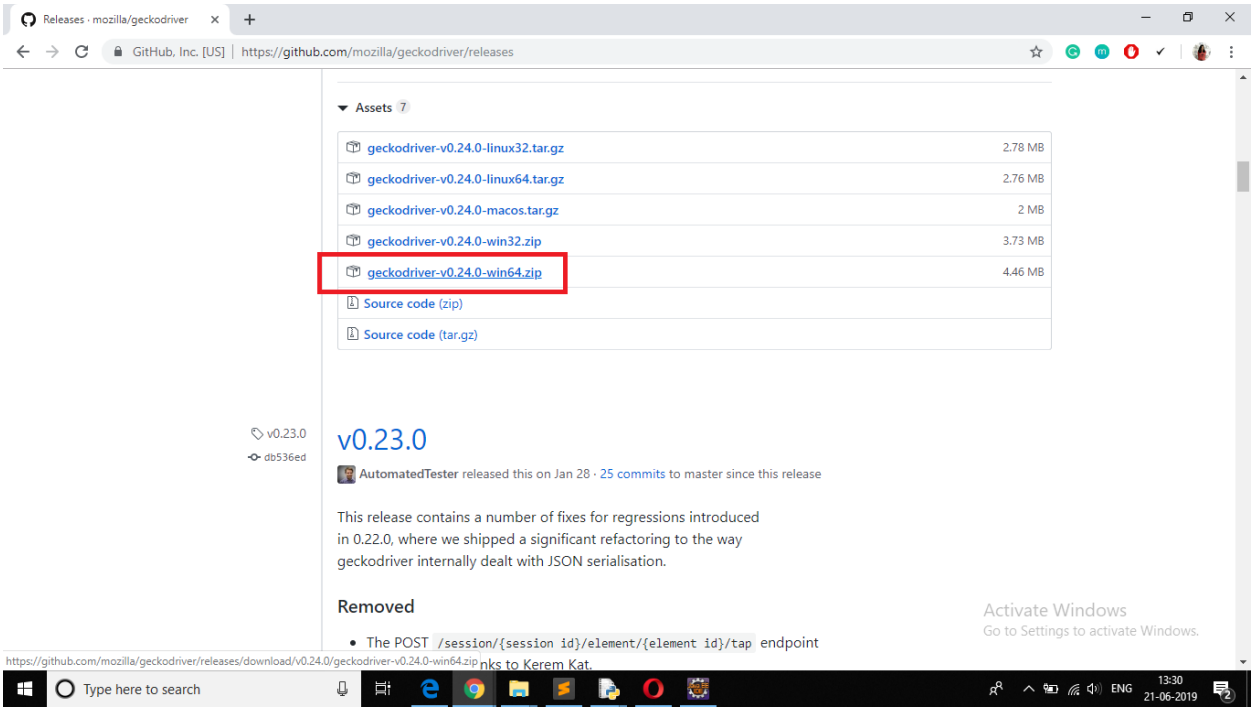

Image 5: Click on the .zip file to install geckodriver for Windows (64-bit).

4. **Python**

   If Python isn't already installed in the system, enter the following link in your web browser: https://www.python.org/downloads/windows/

   From the "Downloads" tab, click on the latest release of Python to download:

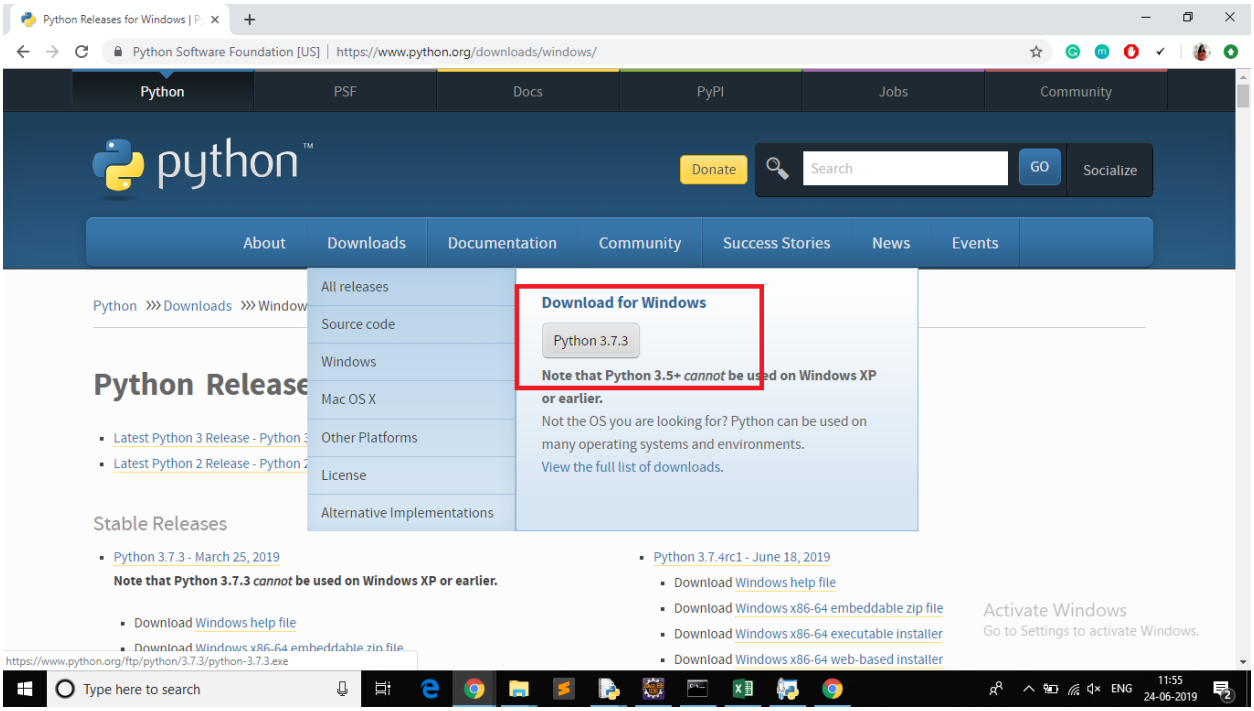

Image 6: Download Python's leatets release from python.org

Double-click on the downloaded .exe file to run the Installation process.

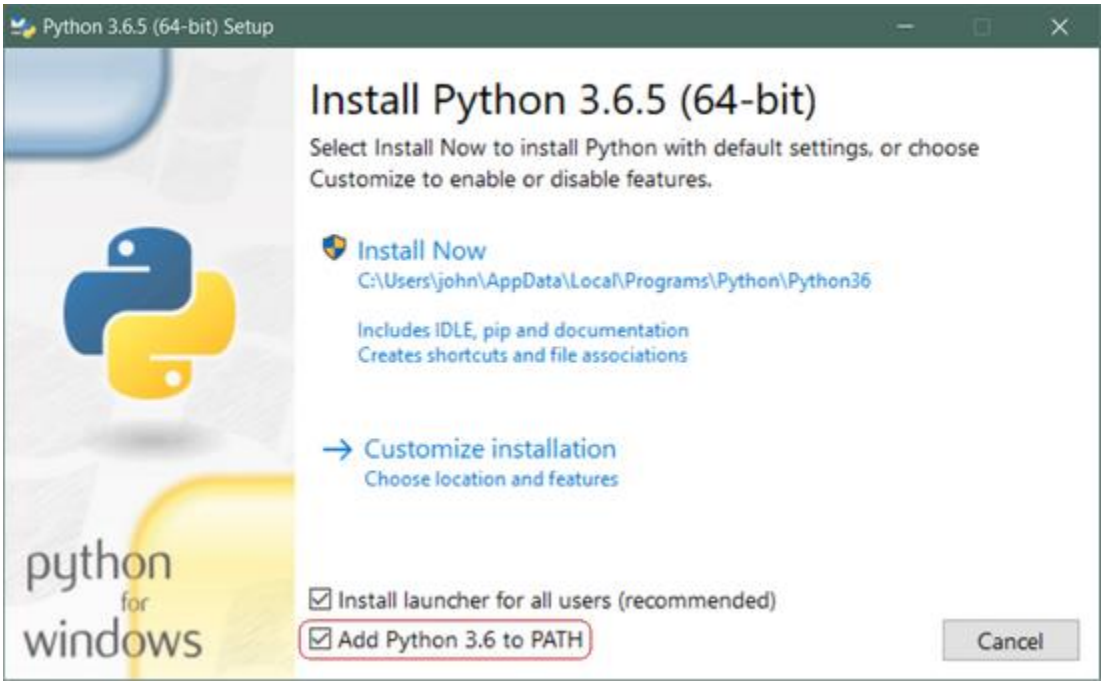

Image 7: Installation Window of Python

NOTE: Make sure to select the "Add Python x.x to PATH.

Click on “Install Now” and let the steps carry forward and your installation is complete.

You can check if Python is properly installed in your system by running `python` command in your command prompt window.

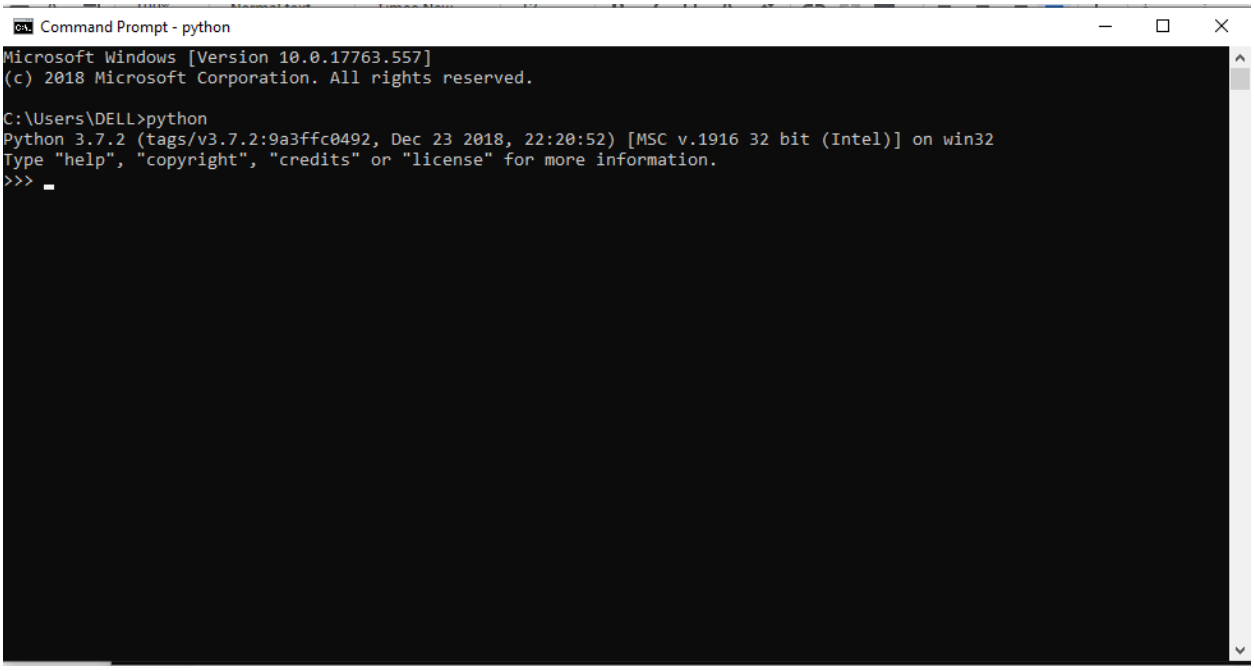

Image 8: If running the `python` command shows the version this way, it indicates that Python has been successfully installed.

5. **Install Python libraries**

Open the “Scripts” folder from the “Python37-32”(the name depends on the latest version of python installed in the system) folder.

This folder gets stored for different users at different paths when Python is installed.

Follow the following process to find the desired Prompt window:
From the Windows Search button, search “pip”.
Under the Commands section, you will see pip.

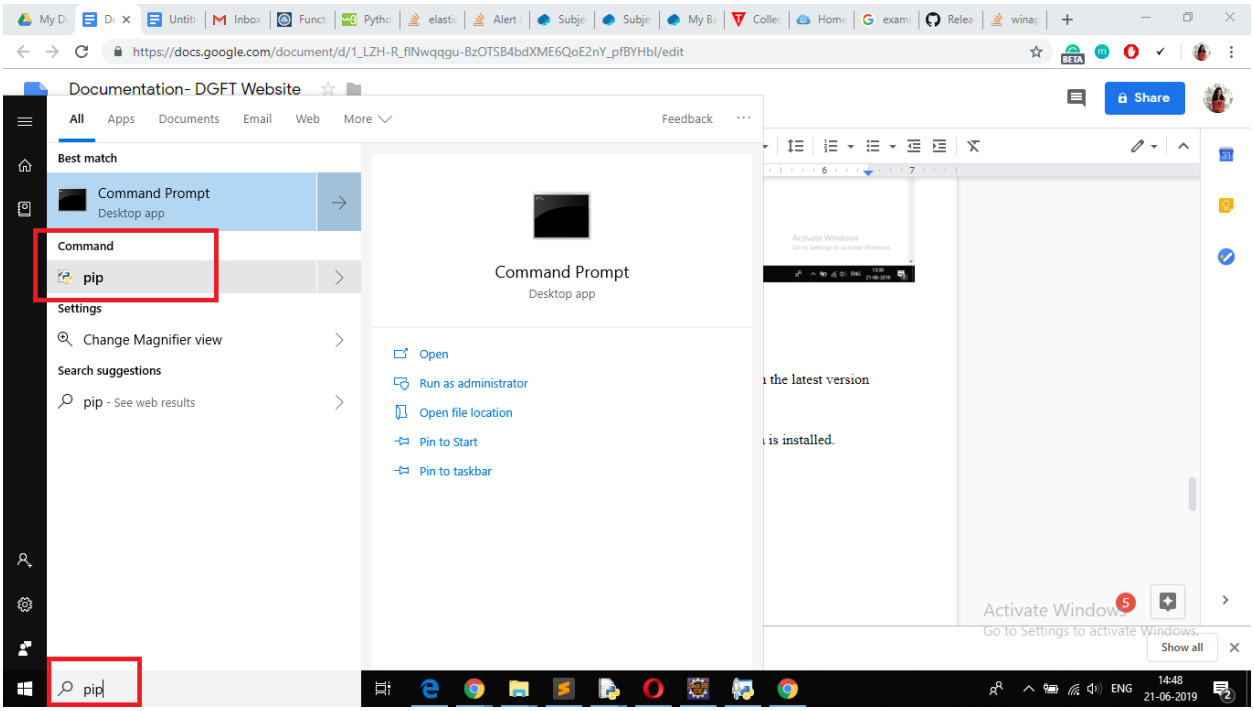

Image 9: Right-click on the `pip` option under the `Command` section.

Right-click and choose “Open file location”.
This will lead you to the desired “Scripts” folder.
At the area, where the folder path is written, click and type “cmd” and enter.

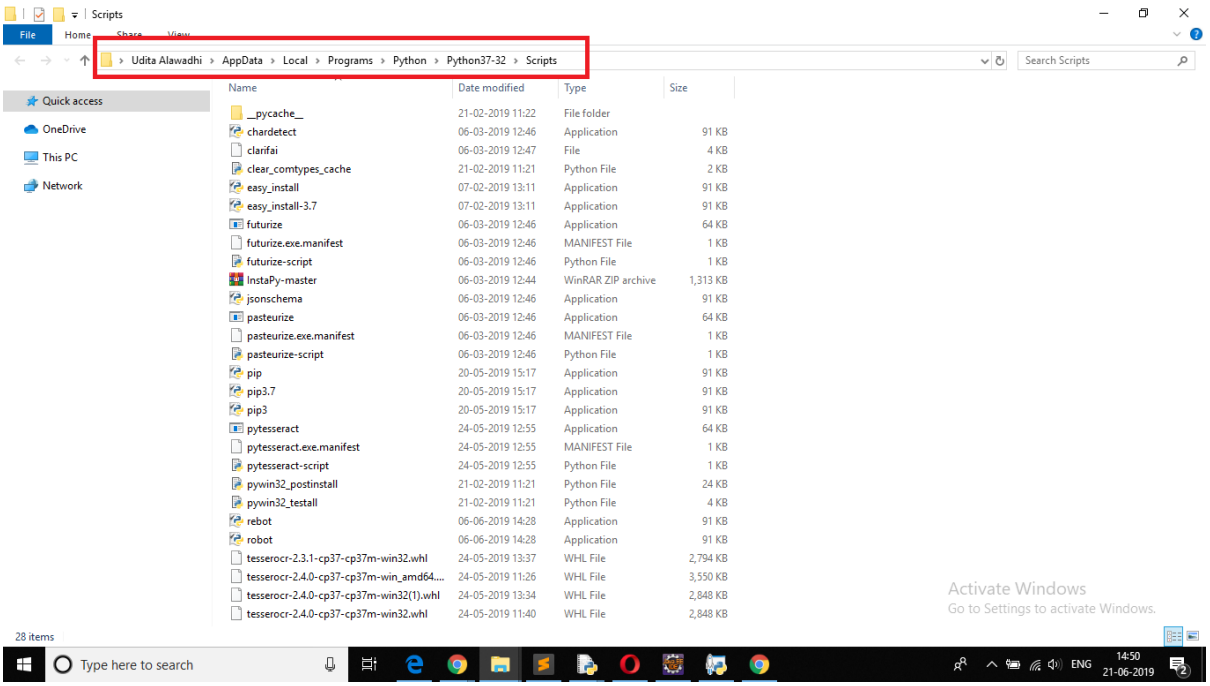

Image 10: Click on the marked Folder-Path button.

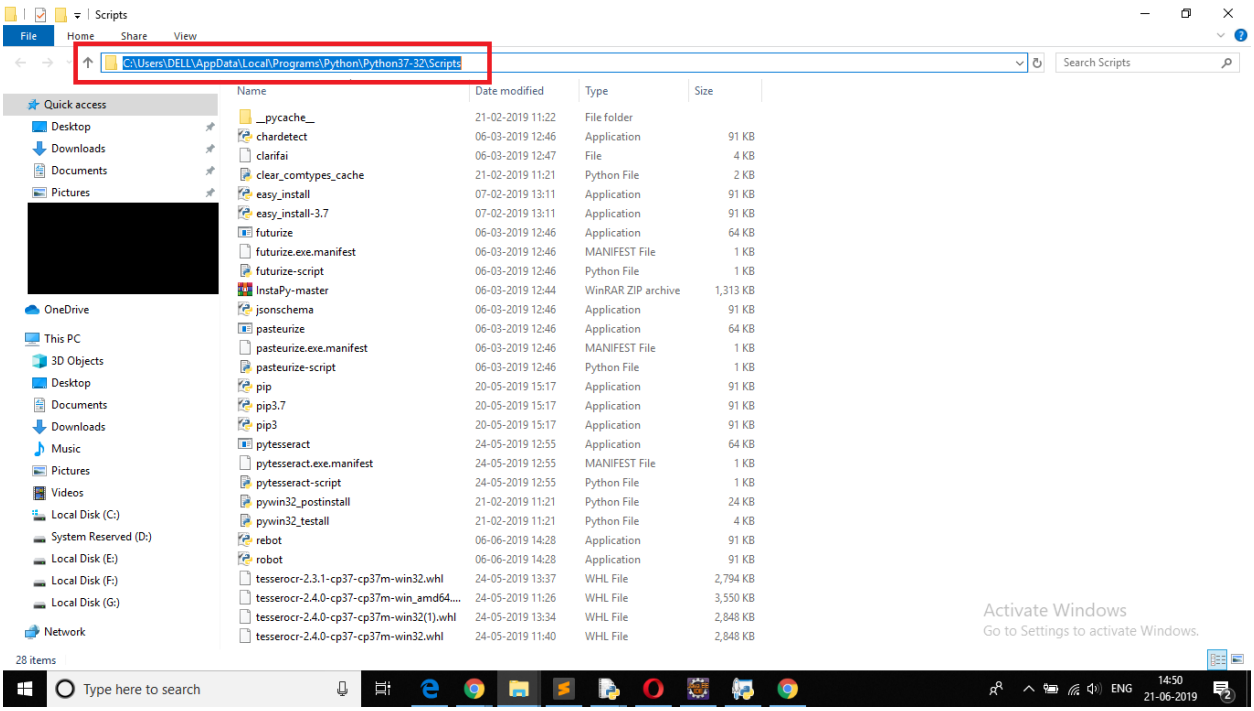

Image 11

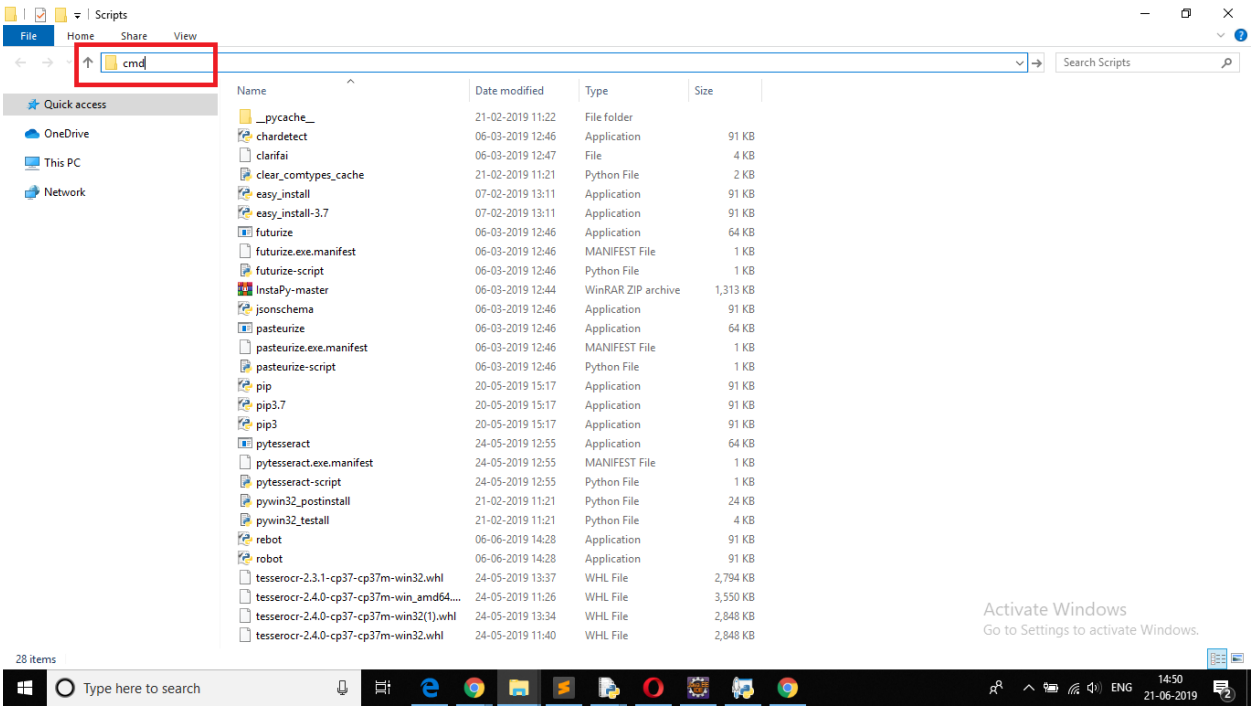

Image 12: Enter `cmd` in the Folder-path input area.

The following Command Prompt window will open with the Scripts file location:

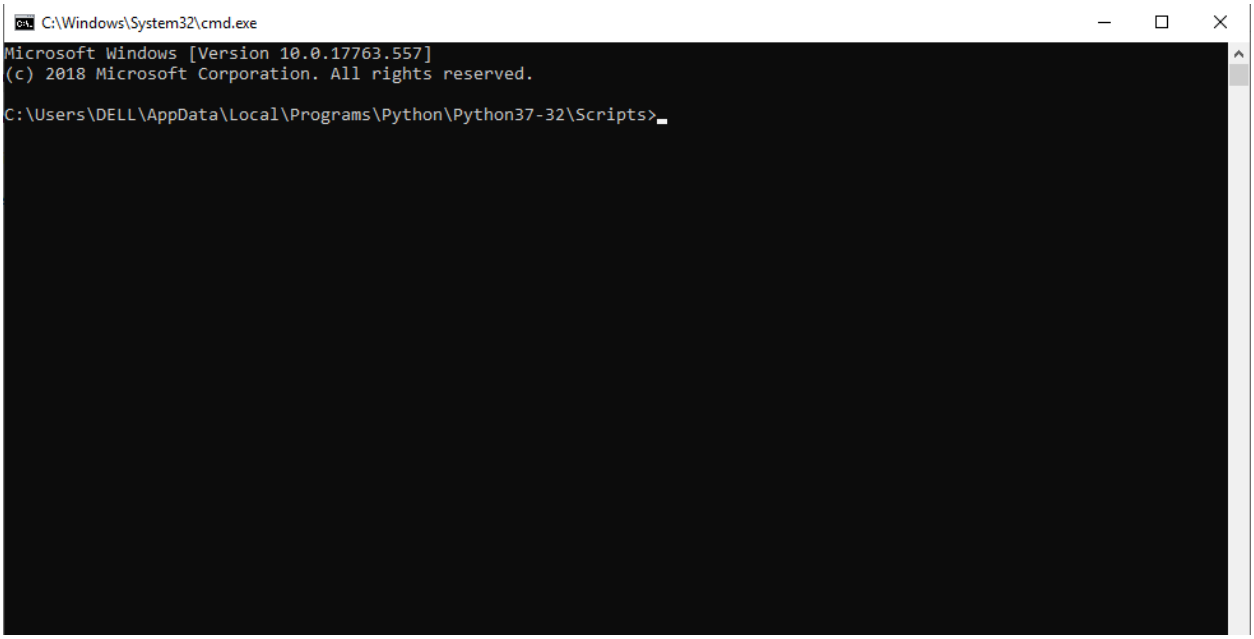

*Image 13: Command Prompt with **Scripts** folder file-location.*

One by one, enter the following commands:

- `pip install openpyxl`
- `pip install easygui`
- `pip install pywin32`
- `pip install time`
- `pip install selenium`
- `pip install pynput`
- `pip install subprocess`

If "`Required already satisfied`" shows on the screen, move to the next one.

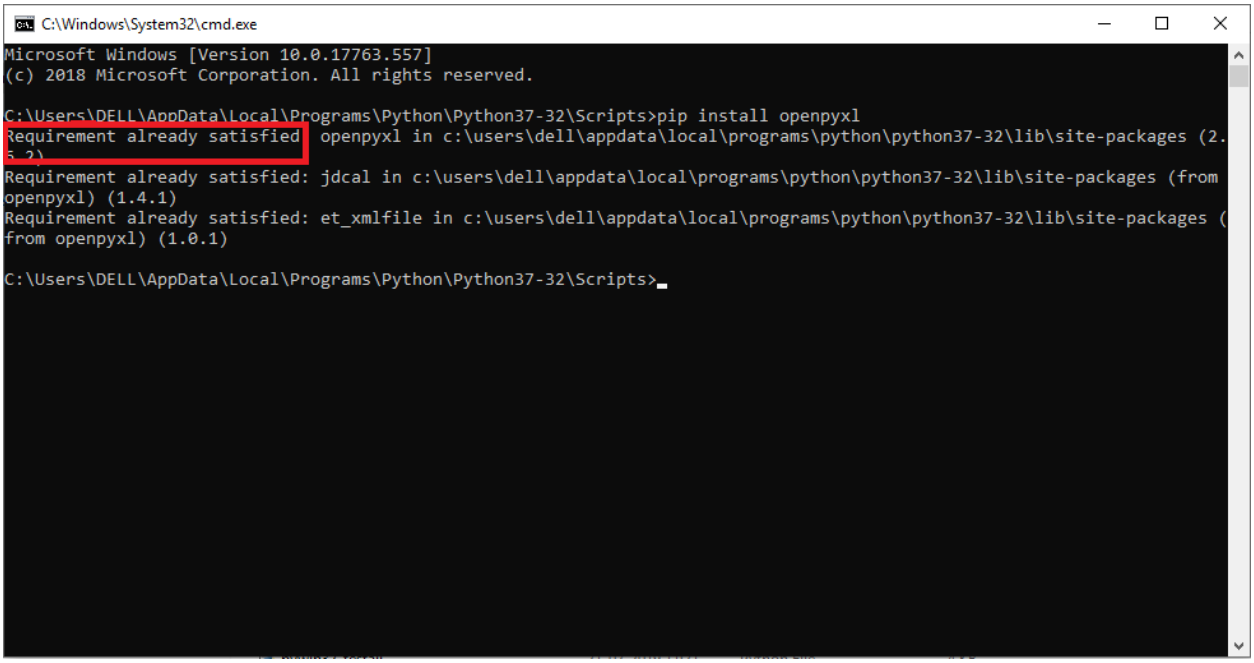

Image 14: `Requirement already satisfied`: The library is already installed.

If not, the libraries will install once you enter the commands specified above.

6. **AutoIT**

   Enter the following link in the web browser: https://www.autoitscript.com/site/autoit/downloads/

   Download AutoIT:

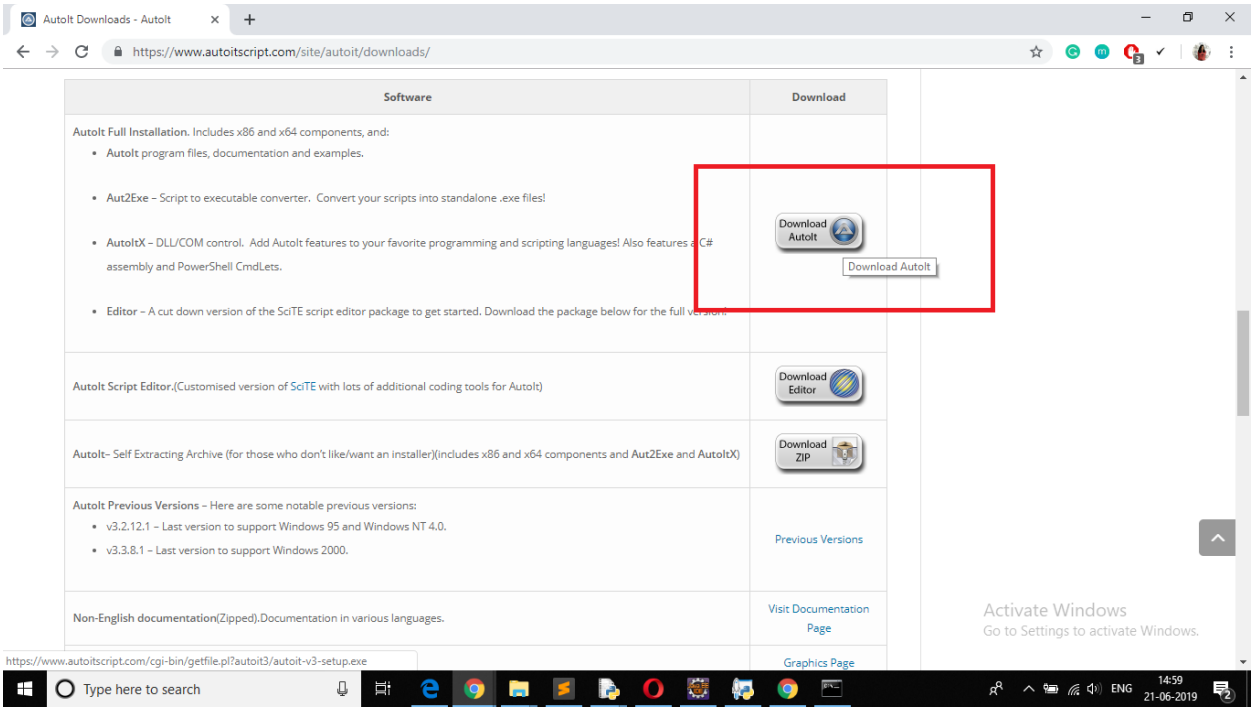

Image 15: Click on the Download AutoIT as shown in the figure.

Next, download AutoIT Editor:

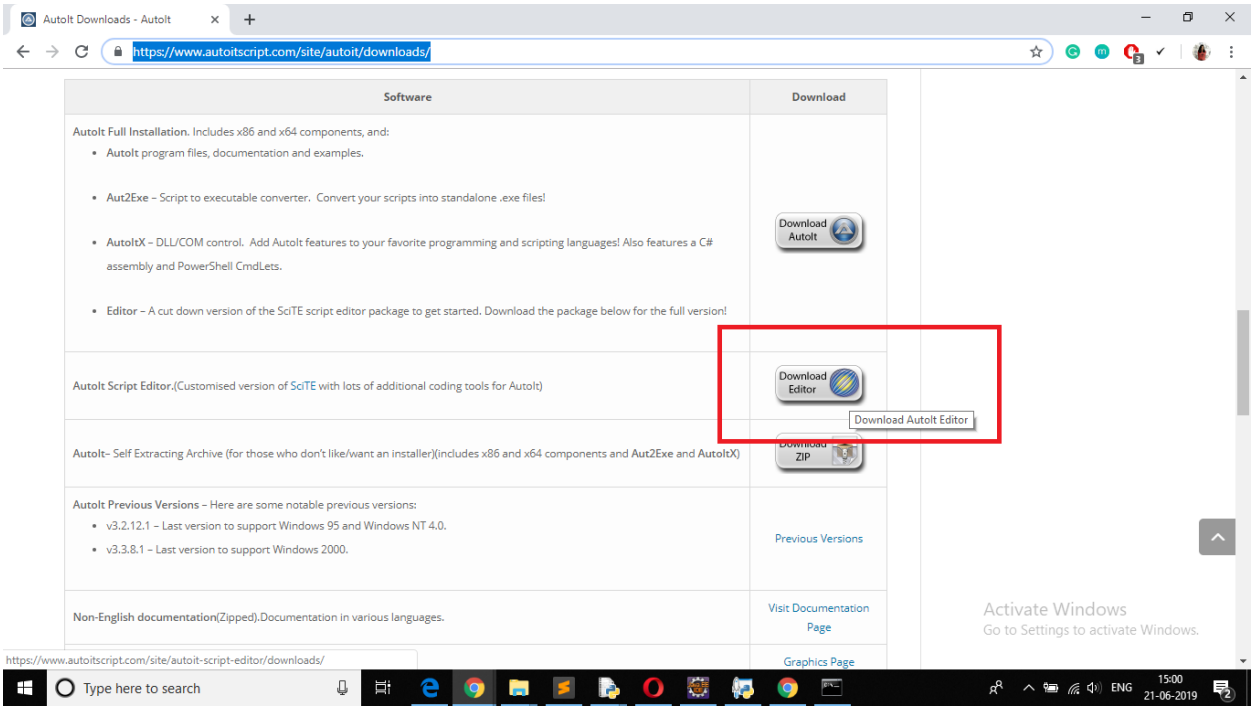

Image 16: Click on Download AutoIt Editor as shown in the figure.

7. **Preparing .py and .au3 files**
   If the following .exe files aren't downloaded because of security issues, right click on all the .au3 files and select "Compile". Make sure there are four new .exe files for the same.
   - `autoitsave.exe`
   - `autoitsave2.exe`
   - `autoitPrint.exe`
   - `autoitPrint2.exe`

Procedure to RUN:

1. **Editing the Excel Sheet**

   Two important things to take care of the Excel sheet:

   - Enter the required value in the **"Sheet1"** of the "seleniumtesting.xlxs" file, starting from Row 2.
   - Enter the path location in Cell **"K1"** of **"Sheet2".**
   - Enter the path value of the geckodriver.exe in the Cell **"K2"** of **"Sheet2"**.
   - Enter the path value in which all the files are stored (unzipped folder) in the Cell **"K3"** of **"Sheet2"**.

2. **Editing Python Files**

   Right-click on the required file and choose '*Edit with IDLE*'. The changes that are needed in the python programs are as follows:

   - **CombinedPrintSave.py**

     In line 11,

     ```
     wb=openpyxl.load_workbook('C:\\Users\\DELL\\Desktop\\seleniumtesting.xlsx'),
     ```

     In line 90,

     ```
     wb.save('C:\\Users\\DELL\\Desktop\\seleniumtesting.xlsx')
     ```

     In line 107,

     ```
     wb.save('C:\\Users\\DELL\\Desktop\\seleniumtesting.xlsx')
     ```

     the path of the seleniumtesting.xlsx is needed to be added manually so that values get saved.

     NOTE: Don't forget to add "\\" instead of "\".

   - **seleniumFirefoxSaveBRC.py**

     In line 9,

     ```
     wb=openpyxl.load_workbook('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')
     ```

     In line 65,

     ```
     wb.save('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')
     ```

     In line 80,

     ```
     wb.save('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')
     ```

     the path of the seleniumtesting.xlsx is needed to be added manually so that values get saved.

     NOTE: Don't forget to add "\\" instead of "\".

- **seleniumFirefoxPrintBRC.py**

  In line 9, `wb=openpyxl.load_workbook('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')`

  In line 65, `wb.save('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')`

  In line 82, `wb.save('C:\\Users\\DELL\\Desktop\\FinalBRC\\seleniumtesting.xlsx')`

  the path of the seleniumtesting.xlsx is needed to be added manually so that values get saved.

  NOTE: Don't forget to add "\\" instead of "\".

NOTE:

Right-click on `autoitPrint.au3`, choose "Edit Script" and in line 13, replace "OneNote" with the name of the printer which you need.

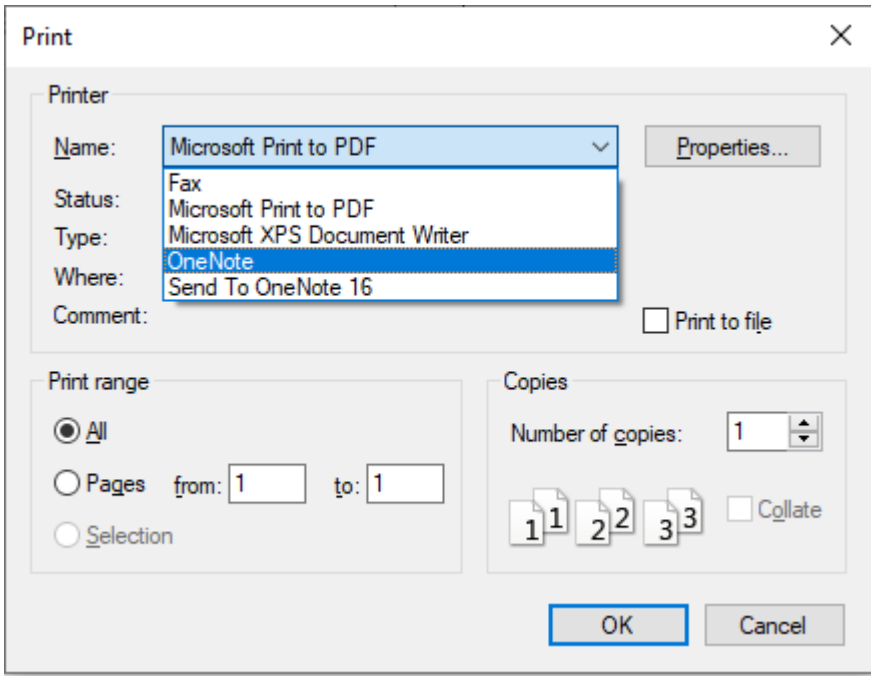

Image: Looking at the name of the Printer

After you change the name of the Printer, click on **Tools** and **Compile.**

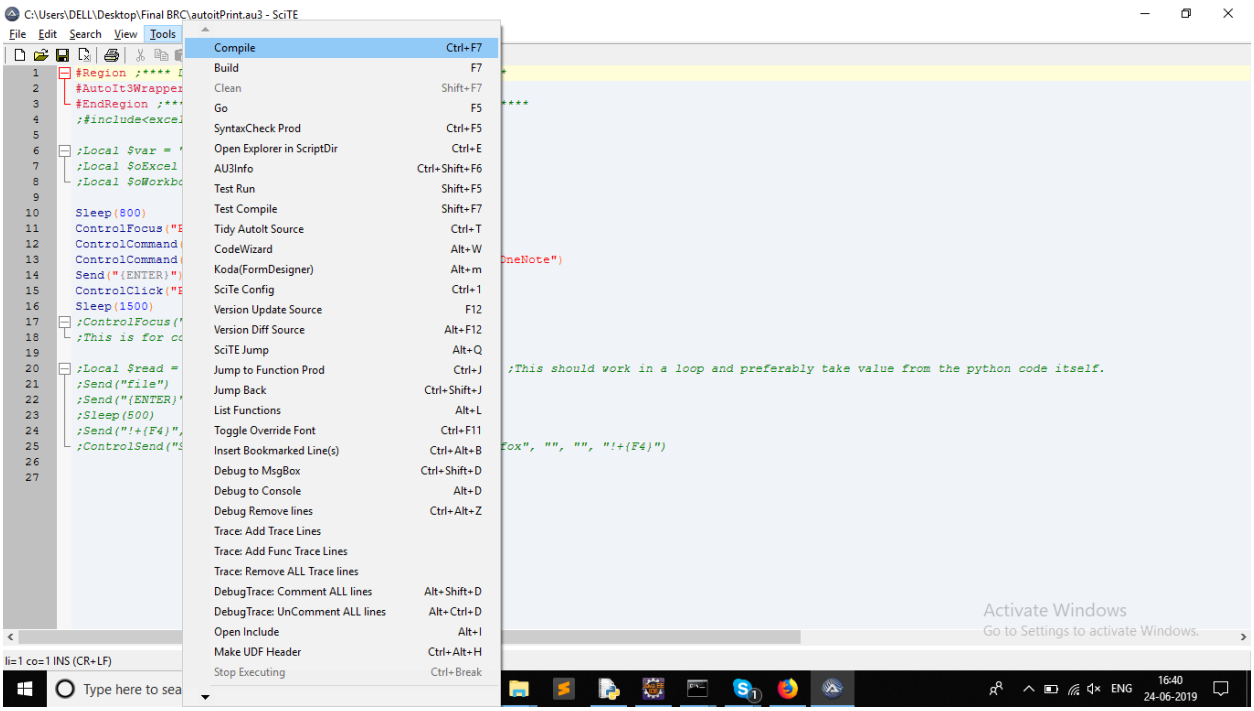

Image: Click on Comile and "Compile Script"

3. **Run**

   Double click on the required Python file according to the desired process need.

   - Run "`seleniumFirefoxSaveBRC.py`" if you want to **only save** documents in the desired path.
   - Run "`seleniumpFirefoxPrintBRC.py`" if you want to **only print** the documents.
   - Run "`CombinedPrintSave.py`" for saving the documents in the desired location and also, printing them.

NOTE: Make sure that all the files downloaded, `.py` and `.au3` files, are all stored in the same folder.

NOTE: Make sure that the excel sheet, seleniumtesting.xlsx, is closed before you run the program.

NOTE: Take care that the IECs starting with '0' are copied as it is, else the program will fail to show "invalid IEC"

NOTE: If the Python script doesn't catch the AutoIT files in the first go, stop the program there itself and run it again.